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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,863	04/12/2004	Andreas Hamburger	321.43756X00	1849
20457 7590 10/03/2007 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER PELHAM, JOSEPH MOORE	
			ART UNIT 3742	PAPER NUMBER
			MAIL DATE 10/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/821,863

Applicant(s)

HAMBURGER ET AL.

Examiner

Joseph M. Pelham

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13, 19, 21, 22, 29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 6 and 29 is/are allowed.
- 6) ☒ Claim(s) 2, 4, 7, 8 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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The Examiner acknowledges Applicant's submission of the amend filed 7/17/07. Claims 2-13, 19, 21, 22, and 29 are now pending.

Claim Rejections - 35 USC § 112

Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, line 2, the negative limitation "non-positive fixing" is indefinite, since in this context it allows a virtually unlimited set of alternatives.

This term does not occur in the specification. The Examiner formally queries the meaning of "non-positive connection."

Claim Rejections - 35 USC § 102

Claims 2, 4, 7, 11, 12, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. 4783587.

Referring to Figs. 18 & 20, 4:10-27 and 6:26-39 ("column:line"), US'587 discloses a heating device comprising contact plates 12, 13 molded and held "positively" in an insulated holding frame 50 consisting of plastic (PVC), completely covering the side remote from the PTC element 11, where the holding frame secures the PTC element on the contact plates, with "bulges" 51, 53 "projecting over" a narrow side of the frame and fully capable of "non-positive connection" in a larger tube.

Claims 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by FR2826829

Referring to Figs. 1-11, FR'829 discloses a heating device comprising contact plate 14, an insulated holding frame 12 consisting of resin (which includes plastics); where the holding frame secures the PTC element 16 on the contact plates, cross bars 15, and several such devices held in parallel.

Referring to Fig. 11, for example, the contact plate is held "frictionally," even if it is not exclusively frictional forces which secure the plate. Projections 15a ensure that the device would be damaged if the plate was withdrawn, as claimed.

Claim Rejections - 35 USC § 103

Claims 8, 10, 13, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US'587.

While the claims differ from US'587 in calling for the contact plate to project out of the frame to form terminal lugs, and a frame of polymer ceramic, these do not patentably distinguish the claims from the prior art. It would have been obvious to form protruding lugs since such are common alternative means to provide terminal connectors, and to utilize a polymer ceramic frame because it is a conventional material for electrically insulating structural components.

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Allowable Subject Matter

Claims 3, 6 and 29 are allowed.

Claims 5, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 2, 4, 7, 8, 11-13, 19, and 31 have been considered but are moot in view of the new ground(s) of rejection.

Claim 21 recites just the contact plate frictionally held by the frame, while Applicant's remarks address only a plate molded into the frame; hence the rejection of claims 21 and 22 is maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph M. Pelham whose telephone number is 571-272-4786. The examiner can normally be reached on M-F 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/29/07



**JOSEPH PELHAM
PRIMARY EXAMINER**

